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**From:** Tonnesen, Gail [/O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=74A573ADAC664C25B77C5B4DAE45A54C-TONNESEN, GAIL]  
**Sent:** 6/2/2014 6:57:52 PM  
**To:** richard.lataitis@noaa.gov  
**CC:** Reddy - CDPHE, Patrick [patrick.reddy@state.co.us]  
**Subject:** FW: Stratospheric O3 intrusion likely to affect Colorado surface concentrations tomorrow

Hi Rich,

I noticed that the BAO tower webpage has not reported any data since about 22:00 May 31, and that no surface O3 data has been reported during May. Do you know if surface O3 data is being collected? There is a possibility of a stratospheric intrusion Tuesday-Wednesday this week, and the real time BAO data is very useful.

Thanks,  
Gail

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From: Reddy - CDPHE, Patrick [mailto:patrick.reddy@state.co.us]  
Sent: Monday, June 02, 2014 10:41 AM  
To: Tonnesen, Gail; Brad Pierce; Andrew Langford-NOAA Federal; pfister@ucar.edu; Pierce', 'GORDON; Christoph Senff; Crawford, James H. (LARC-E303); Pickering, Kenneth E. (GSFC-6140); Frank M. Flocke <ffl@ucar.edu>; Scott Landes - CDPHE  
Subject: Stratospheric O3 intrusion likely to affect Colorado surface concentrations tomorrow

Hi all,

A potent little shortwave is likely to bring streamers of stratospheric air to 600 mb over Colorado on Tuesday. Afternoon mixing to about 550 mb and lee wave phenomena in the lee of the Divide will allow some of this air to mix to ground-level sites beginning at 18Z on Tuesday June 3, with the highest impacts expected at Gothic, RMNP, Manitou Springs, the Air Force Academy, and basically most of the Front Range foothills and plains sites. The streamers should also impact southeast WY. There could be impacts in some areas of Utah as well.

The wildcard at the moment is how much lower stratospheric O3 is available for entrainment into the streamers. Brad Pierce's IDEA International tool confirms the possibility of intrusion impacts on Tuesday, but it looks like the center of this moderate sized trough which is off of California is not yet covered by GOES or GOME O3 products.

If we think there is a possibility of exceedances on Tuesday, we will issue an advisory or action day for O3 (later today or tomorrow AM). Blowing dust advisories are also being considered.

Regards,

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Patrick J. Reddy  
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